

NOTE

First Record of *Aedes (Ochlerotatus) grossbecki* (Dyar and Knab)
(Diptera: Culicidae) in Alabama, U.S.A.

Aedes (Ochlerotatus) grossbecki (Dyar and Knab) (Savage and Strickman 2004) is described as a rare eastern/northeastern species reported from a few scattered localities in the Southeast (King et al. 1939, Carpenter et al. 1946, King et al. 1960). Its distribution has expanded to reach from Texas northeastward to New Hampshire, with the conspicuous exception of Alabama, Georgia, and Florida (Darsie and Ward 2005). The current recognized distribution of *Ae. grossbecki* in the United States is Arkansas, Delaware, Illinois, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, South Carolina, Tennessee, Vermont, Virginia, Connecticut, Indiana, Pennsylvania, and Wisconsin (Rayburn et al. 2004, Darsie and Ward 2005). Larvae of the species are typically found in early spring pools and are common throughout the post oak flats along the Mississippi River (Carpenter and LaCasse 1955, King et al. 1960). To date, information regarding adult habits of *Ae. grossbecki* is limited, although it is reported to be a persistent biter (Carpenter et al. 1946, Carpenter and LaCasse 1955, King et al. 1960). It is also speculated that the species is univoltine (Headlee 1945, Carpenter et al. 1946, King et al. 1960), thereby limiting their nuisance potential. We report the first collections of *Ae. grossbecki* from Alabama, leaving only a southeastern gap in Georgia and Florida where the species has not been recorded.

Alabama collection records are: Redstone Arsenal, 19 April 2005, CDC light trap baited with CO₂, Collector: Michael S. King, 1 ♀; Redstone Arsenal,

3 May 2005, CDC light trap baited with CO₂, Collector: Michael S. King, 1 ♀.

Mosquito surveillance is conducted at Redstone Arsenal, Alabama, as part of the United States Army Center for Health Promotion and Preventive Medicine-South (USACHPPM-S) West Nile virus surveillance program. Collections are made using CO₂ baited CDC light traps hanging five to six feet high. In accordance with the surveillance program at Redstone Arsenal, the traps are placed in the late afternoon and retrieved early the following morning. Mosquitoes are killed by freezing at 0°C for 30 minutes, placed in microcentrifuge tubes labeled with collection data and then shipped to USACHPPM-South after preliminary identification by the preventive medicine staff at Redstone Arsenal (Darsie and Ward 1981).

On 26 April and 4 May 2005, two separate submissions from Redstone Arsenal were received at USACHPPM-South for identification and assay processing. Each of these submissions contained one *Ae. grossbecki* specimen, the identification of which was confirmed by the Entomological Sciences Division (ESD) staff (Carpenter and LaCasse 1955) and further verified by Leopoldo M. Rueda as *Ae. grossbecki* (Dyar and Knab) (Carpenter and LaCasse 1955, Darsie and Ward 2005). Specimens have been deposited in the Walter Reed Biosystematics Unit mosquito collection at the Smithsonian Institution in Washington, DC.

The two specimens were collected from trap sites 7 (34°40.40'N, 86°37.53'W) and 11 (34°42.01'N, 86°38.19'W) on Redstone Arsenal. Both locations are within 100 feet of a creek and one is

near a construction site. The construction site may have possessed temporary vernal pools, which provided oviposition sites for this woodland pool breeder (Carpenter and LaCasse 1955, King et al. 1960). Both traps sites are in close proximity to human activity, one near a parking lot used for permanent party barracks and the other behind a set of Youth Services batting cages. There are wooded areas near both traps, which although they are limited in size and density, could have provided a breeding site for the species from where they flew some distance to the traps.

Based on the accepted distribution of *Ae. grossbecki*, its discovery in Alabama is not surprising. According to records from the 2004 USACHPPM-South arboviral surveillance program, twenty-one *Ae. grossbecki* specimens were submitted from Redstone Arsenal in April and May of that year. However, these specimens were not submitted for confirmatory identification or deposition. Based on the 2004 and 2005 records, the species most commonly associated with *Ae. grossbecki* at Redstone Arsenal were *Aedes vexans* (Meigen) and *Anopheles punctipennis* (Say).

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- Jennifer Caci, Michael S. King, Jeri Humphries, Kristin Cobb, Stephen Garvin, Dennis D. Kuhr, Jimmy Wedincamp, and Erin Stanwix, (JC) *U.S. Army Command and General Staff College, Intermediate Level Education- Army Operational Warfighter Course, Fort Leavenworth, KS 66027, U.S.A. (e-mail: Jennifer.caci@us.army.mil); (MSK) Department of Preventive Medicine, Fox Army Community Hospital, Redstone Arsenal, AL 35808, U.S.A.; (JH) Colorado State University, Department of Technical Communications, Fort Collins, CO 80523, U.S.A.; (KC, SG, DDK) U.S. Army Center for Health Promotion and Preventive Medicine-South, Fort McPherson, GA 30330-1075, U.S.A.; (JW) MathScience Division, 131 College Circle, East Georgia College, Swainsboro, GA 30401, U.S.A.; (ES) Reedy Creek Improvement District, 2192 South Service Lane, Lake Buena Vista, Florida, 32830, U.S.A.*